

CLAIMS

1. A process for producing a fermentation product in a fermentation medium which process include a fermentation step, comprising subjecting the fermentation medium to at least one surfactant and at least one carbohydrate-source generating enzyme.
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2. The process of claim 1, wherein the surfactant is an alcohol ethoxylate.
3. The process of claim 1, wherein fermentation is carried out using a fermenting
10 microorganism, preferably yeast.
4. The process of any of claims 1-3, wherein said fermentation product is ethanol.
5. The process of any of claims 1-4, wherein the carbohydrate-source generating
15 enzyme is glucoamylase or an alpha-amylase, or mixtures thereof, preferably in mixture of acidic fungal alpha-amylase activity (AFAU) per glucoamylase activity (AGU) (AFAU per AGU) of at least 0.1, in particular at least 0.16, such as in the range from 0.12 to 0.50.
6. The process of claim 5, wherein the glucoamylase is derived from a strain of the
20 genus *Corticium*, preferably a strain of *C. rolfsii*, the genus *Talaromyces*, preferably *T. emersonii*, the genus *Aspergillus*, preferably *Aspergillus niger*.
7. The process of any of claims 1-6, wherein further a cellulase, cellobiase, or
hemicellulase is present.
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8. The process of any of claims 1-7, wherein fermentation step which is part of a simultaneous saccharification and fermentation process (SSF) or a liquefaction, saccharification, and fermentation process (LSF).
9. The process of any of claims 1-8, wherein the fermentation step is carried out in the
30 presence of further one or more enzymes selected from the group consisting of an esterase, phytase, xylanase, laccase, protease, alpha-amylase, and glucoamylase.
10. The process of any of claims 1-9, wherein the fermentation is part of a dry milling
35 process or of a wet milling process.

11. The process of claim 10, wherein the raw material for milling process is a starch-containing raw material, such as corn, wheat, barley, or milo.
12. A process for producing ethanol, comprising
- 5 (a) milling whole grains;
- (b) liquefying the product of step (a);
- (c) saccharifying the liquefied material obtained in step (b);
- (d) fermenting the saccharified material using a fermenting microorganism, wherein the fermentation process further comprises contacting the fermentation media with
- 10 at least one surfactant, at least one carbohydrate-source generating enzyme.
13. The process of claim 12, wherein the carbohydrate-source generating enzyme is a glucoamylase or an alpha-amylase or mixtures thereof, preferably in mixture of acidic fungal alpha-amylase activity (AFAU) per glucoamylase activity (AGU) (AFAU per AGU) of at least
- 15 0.1, in particular at least 0.16, such as in the range from 0.12 to 0.50.
14. The process of claim 13, wherein the glucoamylase is derived from a strain of the genus *Corticium*, preferably a strain of *C. rolfsii*, the genus *Talaromyces*, preferably *T. emersonii*, the genus *Aspergillus*, preferably *Aspergillus niger*.
- 20 15. The process of claim 12, further comprising distilling the fermented material.
16. The process of any of claims 12-15, wherein said process is a simultaneous liquefaction and saccharification process (SSF) or a simultaneous liquefaction,
- 25 saccharification and fermentation process (LSF).
17. The process of any of claims 12-16, wherein said process comprises adding one or more further enzymes from the group of esterase, such as lipase or cutinase, phytase, cellulase or hemicellulase, xylanase, alpha-amylase, glucoamylase or mixtures thereof.
- 30 18. The process of claim 17, wherein said surfactant is an alcohol ethoxylate.
19. The process of claim 12, wherein said fermenting microorganism is yeast.
- 35 20. The process of claim 19, wherein the yeast is a strain of *Saccharomyces cerevisia*.